

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-011095

(43)Date of publication of application : 16.01.2001

(51)Int.Cl.

C07K 14/605

A61K 38/00

A61P 3/04

A61P 3/10

A61P 5/50

(21)Application number : 2000-152778

(71)Applicant : NOVO NORDISK AS

(22)Date of filing : 22.08.1997

(72)Inventor : KNUDSEN LISELOTTE BJERRE  
HUUSFELDT PER OLAF  
NIELSEN PER FRANKLIN

(30)Priority

Priority number : 96 931      Priority date : 30.08.1996      Priority country : DK

96 1259      08.11.1996      DK

96 1470      20.12.1996      DK

(54) GLP-1 DERIVATIVE

(57)Abstract:

PROBLEM TO BE SOLVED: To delay an action profile of GLP-1.

SOLUTION: The objective substance is a GLP-1 derivative and its analog having an oleophilic substituent added to at least one amino acid residue of the parent peptide. When the substance has only one oleophilic substituent and the substituent is added to the N-terminal or C-terminal amino acid residue of the parent peptide, the substituent is a group having alkyl or  $\omega$ -carboxylic acid group. The derivative especially has a physiological property of slow action profile compared with GLP-1 (7-37).